Tribal Shellfish Management

Introduction

Shellfish have been a mainstay of western Washington Indian tribes for thousands of years. Clams, crab, oysters, shrimp, and many other species were readily available for harvest year-round. Because large amounts could be harvested, cured, and stored for later consumption with relative ease, shellfish were an important source of nutrition for tribes – nearly as important as salmon.

Shellfish remain important for economic, subsistence, and ceremonial purposes. The rapid decline of many western Washington salmon stocks, due in large part to habitat loss from the region's burgeoning human population, has pushed shellfish to the forefront of many tribal economies.

The tribes have two distinct types of shellfish harvests – commercial and ceremonial/subsistence. Shellfish harvested during a commercial fishery are sold to licensed shellfish buyers who either sell shellfish directly to the public or to other commercial entities. Tribes collect taxes from tribal members who sell shellfish. Those taxes are used to help pay for tribal natural resource programs. Ceremonial and subsistence harvests of shellfish, which have a central role in tribal gatherings, are intended for tribal use only.

Treaty Shellfish Rights

As with salmon, the tribes' guarantee to harvest shellfish lies within a series of treaties signed with representatives of the federal government in the 1850s. Language pertaining to tribal shellfish harvesting is included in this section:

"The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians, in common with all citizens of the United States; and of erecting temporary houses for the purposes of curing; together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. Provided, however, that they shall not take shell-fish from any beds staked or cultivated by citizens."

– Treaty of Point No Point Jan. 26, 1855

Dungeness crab, harvested by Quileute tribal fishermen, are off-loaded at La Push.
Photo: D. Preston

In exchange for the peaceful relinquishment of what is today most of western Washington, the tribes reserved the right to continue to harvest finfish and shellfish from all of their usual and accustomed grounds and stations. The tribes were specifically excluded from harvesting shellfish from areas "staked or cultivated" by non-Indian citizens.

Clamming was dominated by the tribes well into the 1920s, but as tideland continued to be purchased by non-Indians, tribes were slowly excluded from their traditional shellfish harvest areas.

Tribal efforts to have the federal government's treaty promises kept began in the early 1900s. The United States Supreme Court ruled in U.S. vs. Winans, that when a treaty reserves the right to fish at all usual and accustomed places, the state may not preclude access to those places.

In 1974, U.S. District Court Judge George Boldt ruled the tribes had reserved the right to harvest half of the harvestable salmon and steelhead in western Washington. Through the "Boldt Decision," upheld by the U.S. Supreme Court in 1979, tribal and state fisheries staff have worked together to develop fisheries regimes to ensure harvest opportunities for Indian and non-Indian alike. This new atmosphere of cooperative natural resources management gave the tribes hope that their treaty-reserved rights to shellfish harvest and management could be restored. Talks between the tribes and the state began in the mid-1980s, but were unsuccessful. In 1989, the tribes were forced to file suit in federal court to have their treaty shellfish harvest rights restored. Years of negotiations were unsuccessful, and the issue went to trial in May 1994.

The Rafeedie Decision And Implementation Plan

After hearing testimony from tribal elders, biologists, historians, treaty experts, as well as testimony from private property owners and non-Indian commercial shellfish growers, Federal District Court Judge Edward Rafeedie followed in the footsteps of the Boldt Decision. He ruled the treaties' "in common" language meant that the tribes had reserved harvest rights to half of all shellfish from all of the usual and accustomed places, except those places "staked or cultivated" by citizens – or those that were specifically set aside for non-Indian shellfish cultivation purposes.

"A treaty is not a grant of rights to the Indians, but a grant of rights from them," Rafeedie wrote in his December, 1994 decision, adding that the United States government made a solemn promise to the tribes in the treaties that they would have a permanent right to fish as they had always done. Rafeedie ruled all public and private tidelands within the case area are subject to treaty harvest, except for shellfish contained in artificially created beds. His decision requires tribes planning to harvest shellfish from private beaches to follow many time, place, and manner of harvest restrictions.

Since the Supreme Court's final refusal in 1999 to hear the case, several parties, including the tribes and shellfish growers, have been working on an implementation plan under the guidance of Seattle federal court judge Robert Lasnik. Under the implementation plan, each party would have a clear and working understanding of the Rafeedie Decision and how it affects their everyday operations.

The tribes have moved past litigation and into cooperative co-management of their treaty-reserved resources with the State of Washington. Tribal shellfish managers have developed harvest management and supplementation plans, and harvest data is collected and shared with other tribes and the state.
Examples of cooperation can be found throughout the Puget Sound and coastal region. On Hood Canal, for example, tribes have reached harvest agreements with private beach owners and the U.S. Navy.

FY 03 Tribal Shellfish Management Activities

Preliminary data for 2002, the most recent available, indicate that treaty tribes in western Washington harvested approximately 957,000 pounds of manila and native littleneck clams; 2.2 million pounds of geoduck clams; 2.2 million oysters; 5.8 million pounds of crab; and 113,000 pounds of shrimp. These fisheries occur throughout Washington coastal areas and Puget Sound. The tribes and state have entered into 27 different regional management plans for a variety of shellfish species. Each species has unique management requirements to ensure biologically sound harvests occur.

Following are several examples of treaty tribal shellfish management activities during FY 03:

Skokomish Tribe

Sunk in mud and nearly hip-deep in water, Eric Sparkman pulls a large oyster shell from a saltwater pond and begins to take measurements. It's not the dimensions of the shell Sparkman is looking to note, it's the size of what's living on the shell he's after.

"There are several Olympia oysters living on this one – five or six – and they're all pretty small," said Sparkman, shellfish biologist for the Skokomish Tribe. "But they are alive and they are slowly growing, and that's really what counts."

Outfitted in hip-waders, Sparkman and Teresa Barron, management biologist for the tribe, spend the afternoon checking two of the five sites near the Skokomish River where Olympia oysters have been planted. The pair counts and measures the juvenile oysters, checking the progress of a project aimed at reintroducing the native species back to the area.

Once abundant on Puget Sound beaches, Olympia oysters have all but disappeared in the region. Most shellfish connoisseurs consider the Olympia oyster, which is usually less than two inches wide and two inches long, a delicacy. And that is partly the reason the oysters were nearly harvested to extinction more than a century ago.

To satisfy a voracious demand for shellfish, Olympia oysters were harvested in great numbers in the mid-1800s. Most of the oysters were shipped to San Francisco during California's booming gold rush years. By 1880, abundant Olympia oyster stocks throughout the Puget Sound were nearly wiped out. As the Olympia oyster began to disappear, the shellfish industry began importing Japanese Pacific oysters to the region. The larger Pacific oysters quickly took over cultivated beds once home to thriving Olympia oysters.

But over-harvest and displacement were only partly to blame. Pollution from western Washington industries, particularly pulp and paper mills, and the loss of habitat to development also played significant roles in the Olympia oysters' demise.

"This project is a unique community venture," Sparkman said. "A lot of different groups have been brought together for a common goal: to re-establish the native Olympia oyster."

Puyallup Tribe

The image of a typical stuck-in-the-mud adult geoduck clam belies the bivalve's more free-flowing young life.

"For the first few weeks, clams and other shellfish float in the current," said David Winfrey, shellfish biologist with the Puyallup Tribe of Indians. Winfrey is tracking the earliest stage in the geoduck life cycle, when the usually settled bivalve is as free floating as any fish. "Their only limitation is how far the tide and ocean currents will take them."

For the past six months, Winfrey has been collecting shellfish larvae at various locations around the Puyallup Tribe's treaty reserved fishing area.

"To really understand the dynamics of the geoduck populations, we need to look at their entire lifecycle," said Winfrey.

The project is a pilot study of a more thorough examination planned for next spring.

In addition to being the foundation for future generations of geoducks and other clams, larvae also support many other populations higher up on the food chain, including juvenile fish and other marine crustaceans which are an important food source for juvenile salmon and baitfish.

Winfrey is out on the water once or twice a week collecting samples. Using a small net with extremely fine mesh, he makes several tows in every location. "Mainly, we're looking for geoduck larvae, because they are an important tribal fishery," he said.

The geoduck clam is the largest bivalve in Puget Sound and the largest burrowing clam in the world. About 109 million adult geoducks live in Puget Sound, the greatest concentration of any marine animal. Puget Sound bays and estuaries harbor the highest density of geoducks in the continuous United States, with the most abundant area being southern Puget Sound.

Other activities during FY 03 included:

- Providing timely harvest regulations to all affected parties.
- Conducting on-site beach surveys.
- Monitoring all tribal shellfish harvests.
- Seeding beaches to enhance clam populations.
- Undertaking major co-management efforts with the State of Washington in developing regional harvest plans for geoduck fisheries. These plans include agreements on monitoring harvest, compliance agreements, harvest methodology, and enforcement cooperation. Improvements in these areas will continue throughout the year.

- Testing water quality and shellfish, and obtaining certification from the state Heath Department before opening beaches to harvest. Tribes have a separate agreement with the Washington State Department of Health for water testing to ensure harvests can safely occur. Tribes conduct regular monitoring of beaches to ensure they are safe for harvest.

- On the national level, tribal and NWIFC representatives were active participants in the Interstate Shellfish Sanitation Conference (ISSC). The national organization of shellfish-producing states develops and recommends shellfish sanitation regulations to the federal Food and Drug Administration.

- On the state level, tribes participated on the Shellfish Advisory Committee, a group of tribal representatives, legislators, local governments and private shellfish growers that advise the state Department of Health and legislative committees on important legislation affecting the shellfish industry. This forum has proven to be highly effective in influencing state legislation to protect shellfish resources.

Conclusion

While tribes have made great strides in shellfish management following the Rafeedie Decision, they are seriously hampered in their efforts by a severe lack of funding.

Although tribes have begun to formulate some of the necessary shellfish management tools, inadequate staffing and funding prevent the tribes from realizing their full potential. Specialized staff is needed to successfully develop effective shellfish programs. Shellfish biologists, certified technicians, enforcement personnel and other staff are all critical to effective shellfish management plans. Expertise in statistics, biometrics and health certification also is necessary.

For hard-shell clam management, additional funding is needed for improving a data management system for catch reporting and population assessment and to assist enhancement efforts. Research on methodologies for population assessment and techniques is especially needed.

Public intertidal areas that are jointly managed by the tribes and state would benefit from increased funding by providing additional resources to manage and enhance the publicly shared areas. Current tribal and state efforts to move forward on enhancement activities in these areas are hampered by inadequate funding.

For shrimp and crab, data gathering is a critical need. Little research has been done to gauge shrimp and crab populations. Data collection and research are needed to increase knowledge of these fisheries with an eye toward development of in-season population assessment methodologies.

Dungeness crab, for example, provide important fisheries for Indian and non-Indian harvesters. True resource conservation, however, has been difficult to achieve because of a lack of information on crab abundance. Adequate management funds are needed for data collection and analysis, improved survey systems and effective enforcement.

Although efforts have been made to update red urchin data in the Strait of Juan de Fuca, more data is still needed on "new" tribal fisheries, such as sea cucumbers, crawfish and other lesser-known species.

The future of western Washington's thriving shellfish resource relies upon the continuation of existing cooperative management between the tribes and their state counterparts.

For More Information:

For more information about the natural resource management activities of the treaty Indian tribes in western Washington, contact the Northwest Indian Fisheries Commission, 6730 Martin Way E., Olympia, WA., 98516; or call (360) 438-1180. Visit the NWIFC home page at www.nwifc.org.